DETERMINATION OF MERCURY IN CANNED FISH

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ABSTRACT

DETERMINATION OF MERCURY IN CANNED FISHES

Mercury is a harmful heavy metal that bioaccumulates in human body and cause disturbance in human systems. The process biomagnifications that occur in the food chain brings mercury closer to human body since human are at the top levels of the aquatic food web fish-eating species besides seabirds, seals and otters. Exposure to mercury can be particularly hazardous especially for pregnant women and small children. The objective of this project is to determine whether the amount of mercury content in the canned fish is safe for the consumption by human. In this study, mercury was determined using Inductively Coupled Plasma – Optic Emission Spectrometer. The samples were prepared using the wet digestion method and mercury standard was prepared in three concentrations of 0.5 mg/L to 1.5 mg/L. The mercury detected in the canned fish was compared to the FDA mercury limit of 0.17 mg/L. Mercury content from the analysis was from 0.006 to 0.364 mg/L. By referring to the highest amount of mercury determined, it can be said that the canned fishes from the A brand is not safe for consumption. Therefore, the A brand canned fish is not safe for the consumption of the pregnant women and children especially.